The Boston Medical and Surgical Journal

TABLE OF CONTENTS

December 12, 1918

Original Articles.

SOME PHASES OF THE SURGERY OF THE STOMACH AND DUODENUM.

By John T. Bottomley, M.D., F.A.C.S., Boston.

We all have ideals in the practice of our profession. How close we come to attaining them depends somewhat upon ourselves, our possession or lack of force, courage, honesty, enthusiasm and perseverance and somewhat, too, upon intrinsic conditions and surroundings over which we may have limited or no control. Unfortunately, not all of us may work under the wonderful conditions that obtain in Rochester—a monument to the foresight, the ability and the personality of those supermen, the Mayos—nor may we labor in connection with great schools and universities as do a few of our confrères in great cities. Many of us, probably most of us, must necessarily carry on under average and far less satisfactory circumstances and, as one of the many, it may not be amiss for me to draw, for the text of my remarks this evening, on my work of the past year in a field that interests us all. It is only fair to state that this work has been done not in one but in many hospitals in Boston and New England. It often necessarily involved the speedy making of a working diagnosis and a very loose control of the after-care of patients.

The surgery of the stomach and duodenum has had its greatest development in the present century. What was rare in 1900 is commonplace today. The smallest hospital has its quota of gastric surgery. That once unusual word, "Gastroenterostomy," is now quickly recognized and correctly pronounced even by the editor of the country weekly. Stomach surgery is no longer a cause of wonder to the laity. It will soon be pocketed in the public mind on the same level as surgery of the appendix. We have travelled far in a short space of time. Have we yet come to the limit in our means of recognizing the clinical expression of gastric and duodenal disease or in our treatment of it, operative or otherwise? To a certain extent each man must answer this question for himself. Varying answers will be given by various men. Whatever interest lies in this brief paper exists because of the fact that it represents an attempt on my part to answer these questions through a running comment on my work of a year and on such errors in diagnosis, surgical judgment, etc., as I made in doing it.

This is not the occasion to detail the various diagnostic methods of this field of our endeavor. These are many, as you know. As to their relative importance, it is my feeling that the clinical history, for the surgeon working under average conditions, is easily first. I say

for the surgeon working under *average* conditions because, if one is working under the best conditions, I should want to rate the roentgenologic examination as of ranking importance. But there are relatively few really expert roentgenologists, men who will take a first-class plate of a bothersome duodenum, for example, and, what is more desirable, give a dependably certain interpretation of doubtful plates. For instance, in twenty-six of my cases of the past year in which the x-ray was used as a possible aid in the diagnosis of duodenal ulcer, the report was indefinite in four cases in which the ulcer was present and wrong in six cases. In twelve cases of gastric disease it was wrong or indefinite in two. In other words, in a total of thirty-eight cases it was grossly wrong in seven instances and indefinite in five. Furthermore, in a large percentage of cases in which the roentgenologic report was incorrect the diagnosis based on the clinical history was correct. To the fortunate few, however, who have the services of an expert, I readily grant that roentgenology holds the first place in the diagnostic field; for the many, however, the clinical history must still remain our safest guide. This fact also holds true in other fields of surgical effort than that of the stomach and duodenum and I want to digress a moment, with your permission, to call the attention of this Society, most of whose members are, I assume, visiting surgeons on hospital staffs, to a duty very much neglected by most of us. John B. Murphy used to say that the clinical history of patients entering hospital wards is through habit and custom taken by the lowest man on the house staff, while its very great importance in the study of disease really entitles it to being taken by the oldest and best trained man. Now here, as in most other instances, John B. Murphy was correct. To the youthful surgeon in hospital residence what should be the most valuable feature of his training? The acquisition of proficiency in obtaining an accurate story of the patient's illnesses present and past, in determining the true relation of the latter to the former, in sifting the essential from the non-essential, in making a careful note of the objective signs of disease present, and finally in forming a reasonably correct interpretation of the facts thus gathered. To whom should he naturally look for instruction in this matter? To none other than to us who make up the visiting staffs of the hospitals. Yet the attitude of the staff in many of our hospitals is one of indifference and neglect. The staff not only makes no effort to teach the residents the science of history taking but the visiting man often fails even to read, not to say criticize, such histories as are taken. I confess that I, too, have been a sinner in the past, but I am trying now to show my repentance by taking a more active interest in this matter and I am being very well repaid.

To return to my theme, I class the diagnostic means as follows: (1) The clinical history, (2) Roentgenologic examination, and (3) Chemical and laboratory tests.

I shall not discuss to any extent the diagnosis of gastric and duodenal disease. In passing, it is well to note that refinement of diagnosis or even a very accurate diagnosis is not always necessary. Under such conditions as I have often met, it suffices to come to a conscientious conclusion as to whether a case is one whose symptoms warrant operation or not. In connection with duodenal ulcer I desire, however, to call attention to a fact that as far as my reading goes is seldom noted. Rapid and marked loss of weight is not uncommonly seen in connection with this lesion—a loss of weight which might lead one to suspect cancer but for the fact that the cachexia so common in the latter is usually lacking here. Two of my cases lost forty pounds each in two months. Many patients with duodenal ulcer are also nervous to a marked degree and any incident which disturbs their nervous equilibrium is very apt to give rise to an exacerbation in their symptoms.

Incision. As with many other things, so with incisions we are creatures of habit. For many years I employed the median epigastric incision for operations on the stomach and duodenum. A certain number of hernias followed even in those whose wounds apparently healed very kindly. I found, too, that hernias following mid-line incisions were very difficult to close satisfactorily. This led me to change my way of approach and now, as a routine measure, I open the sheath of the right rectus muscle, pull the muscle-belly outward and incise the posterior sheath and the peritoneum behind it. Occasionally, if the roentgenologic plate shows an ulcer located high on the lesser curvature, I carry out a similar procedure on the left side. I like this method of approach very much because it not only conserves the nerve supply to the muscles but also affords excellent

protection against the occurrence of hernia, since the posterior scar is covered by the fibres of the strong rectus muscle. The transverse incision I use only very occasionally; considerably more time is required to make it properly and it does not, in my opinion, afford any greater degree of accessibility to the operative field. Its only advantage lies in the fact that far less tension is put upon it in case postoperative distention or vomiting occurs and that there is consequently less danger of extrusion of the intestines in the early postoperative course—something that occasionally occurs through a vertically placed incision.

What surgical procedure shall we apply in the presence of gastric ulcer? In the majority of cases of ulcer at or near the pylorus or in the pyloric end of the stomach, the Rodman operation should be done. In critical cases it may be well to carry out this procedure in two stages, the gastroenterostomy being done at first and the resection postponed for some weeks. The Payr clamp has proved to be a very useful addition to our armamentarium. Closure of the cut ends of the stomach and duodenum has been made easy and safe by its use. With the duodenal end closed, two procedures are offered for our choice, if we plan a one-stage operation. The method now commonly employed is that of closure of the cut end of the stomach followed by the usual posterior gastroenterostomy. The alternative—and I believe it will be used more and more, because of its time-saving—is the Polya operation or the more recent method proposed by Balfour. I have had a limited experience with either the Polya or the Balfour method, but the latter appeals to me very much, since it is easily done and does away with any possibility of undue tension on the suture line and any possible constriction at or near the anastomotic opening by later contraction of the slit in the transverse mesocolon, an objection which in some instances may be urged against the Polya operation. The criticism that the opening between the stomach and jejunum is very large is easily met by narrowing the stomach opening to any desired size and then completing the anastomosis.

To rather well-localized and not too extensive ulcers on the lesser curvature or ulcers so situated that a "sleeve" (midgastric) resection may not be done the Balfour method of turning back a seromuscular flap and destroying the ulcer with the actual cautery is applicable. Suture of the cauterized area and replacing the flap completes the operation. It is still a matter of question whether a gastroenterostomy should not be added to this procedure in every instance, but I am gradually coming to the belief that any such treatment of chronic gastric ulcer on the lesser curvature or on the posterior wall as excision or destruction with a cautery should always be followed by a gastroenterostomy. The anastomotic opening will drain off the acid gastric juice more quickly, will allow the stomach to rest and will thus afford a better opportunity for healing of the traumatized area to take place. I feel, however, that this method is not so radical or so effective as a "sleeve" resection; the latter I regard as the operation of choice when it can be employed and it has in my practice almost entirely supplanted the former so-called "wedge" excision. A relatively new artifice in connection with it and one with which I have as yet had little experience is that of shelling or wiping the vessels with a moist compress off the portion of the stomach or duodenum to be resected. It shortens the duration of the operation and lessens very much the amount of hemorrhage, few forceps or ligatures being necessary. It is surely worth a trial.

I believe that ulcers of the posterior wall are very far from common. Many ulcers which seem to lie on the posterior wall are really ulcers of the lesser curvature which have been pulled posteriorly by the contraction of the scar tissue in and about the ulcer. Codman has called attention to this fact and I have substantiated it many times. Its truth is borne out in practice by the ease with which the gastric vessels are missed in the application of forceps preparatory to severing the gastrohepatic omentum. The vessels are often pulled backward with the ulcer and thus escape the grasp of the forceps.

Many of these ulcers, which at first seem inaccessible and consequently inoperable by the "sleeve" resection method, may be made more or less comfortably accessible by a careful and very thorough separation of adhesions not only along the lesser curvature but of the posterior wall as well. The application of a right-angled clamp above the straight-bladed clamp usually placed transversely across the proximal gastric segment ensures against the slipping of the cut edges from between the blades of the transverse

clamp and adds greatly to the ease and safety of operation. At this point let me again call attention to the value of making the incision in the abdominal wall to the left of the median line, when the roentgenologic plates show a lesion situated high on the lesser curvature. A little gain in accessibility may make possible the operation of choice rather than that of necessity. In the so-called "hour-glass" stomach the most satisfactory operation in my hands has been the so-called "sleeve" (mid-gastric) resection, when that operation has been possible. I believe that this procedure is of far greater value than any form of gastroplasty, because through its employment one secures a thorough removal of the diseased portion of the stomach. In January, 1917, I applied the principle of the Finney gastroduodenostomy in an attempted cure of a high-placed "hour-glass" contraction of the stomach. Relief over a period of ten months followed, but then all the symptoms returned and in January of the present year I was obliged to do a "sleeve" resection for a chronic perforating ulcer at the seat of my first operation. This ulcer had penetrated the pancreas and the operation was one of considerable difficulty.

Very extensive ulcers of the stomach, so extensive as to forbid any attempt at direct operation, may be treated indirectly by making a temporary jejunostomy with the object of affording complete rest to the stomach and thus reducing the extent of the indurated area.

A few true ulcers of the posterior wall must be approached by incising the anterior wall of the stomach, destroying the ulcerated area with the actual cautery and closing the opening with a through-and-through chromic cat-gut suture. In these cases drainage of the lesser peritoneal cavity should be done as a routine and a posterior gastroenterostomy should be added that the acidity of the gastric juice may be diminished and its digestive action on the traumatized area lessened. While I believe the latter to be a wise measure and one that should be usually adopted, it is not always necessary; for I may mention in passing that in a chronic perforating ulcer very high up on the lesser curvature which had eaten a deep hole in the left lobe of the liver and which was so adherent to the liver that I did not dare free it because of the danger of hemorrhage, I opened the stomach anteriorly, passed a curved cautery blade into the cavity of the ulcer and burned it most thoroughly. I did not attempt even a suture. The patient still remains well after many years. On the other hand, during the past year I did a transgastric destruction and suture of an ulcer of the posterior wall and did not do a gastroenterostomy. Recurrence of all symptoms with severe and repeated hemorrhages occurred in six months.

Ulcers on the greater curvature are very rare. I have seen only two; one opened through an umbilical fistula. The umbilicus, the fistulous tract and the ulcer were excised in one piece. Of the other let me speak briefly. —A woman, 32 years old, swallowed a 7½ grain corrosive sublimate tablet. She was given very promptly copious draughts of milk and an emetic and was hurried to a hospital. Diarrhea, vomiting and epigastric pain were severe for a week; then the diarrhea and vomiting gradually ceased, while the pain continued. For some years the patient had had recurrent attacks of appendicitis and now that she was in the hospital both she and her physician felt that the time was opportune for removal of the appendix. I removed it about two weeks after she had taken the tablet. In the routine intra-abdominal examination I palpated her stomach and felt an indurated area on the greater curvature two inches from the pylorus. This proved to be an ulcer and it was easily excised. A careful clinical history taken during her convalescence failed to uncover any evidence of gastric ulcer previous to her present illness. The question naturally arises as to the part played by the very powerful irritant in the production of the ulcer. Personally, despite the word "chronic" in the report of the pathologist, I am convinced that it played a predominant part. The location of the ulcer was very unusual and at a place where such a relatively heavy object as a corrosive tablet might well have rested for a time sufficient to produce a necrosis that would offer excellent ground for the digestive fluid to act on. The influence that irritants in general, such as very hot foods, etc., have in the production of ulcers is by no means definitely settled, but they are certainly worthy of consideration as possible factors of importance. It is a striking fact that in all animals except man cancer of the stomach is very uncommon, while man is very susceptible to it. The reason of this susceptibility is not known. It has been suggested that the chemical changes produced in cooking,

or the seasoning, or even the heat of the food, may have significance in the causation of gastric ulcer which is so frequently the forerunner of gastric cancer.

Certain mechanical features in the making of the anastomotic opening may be regarded as definitely settled. The opening should be placed well to the right and at the lowest level of the stomach. Chromic cat-gut should be used for the suture material to the exclusion of any other. Silk or linen should be used only for supportive purposes and then only in the interrupted form: these only add to the factor of safety and are not really essential. The continuous seroserous suture of silk or linen certainly favored the subsequent formation of ulcers on the mucous surface at or near the anastomotic line and prolonged their duration. Whether the jejunal surface is applied to the gastric surface somewhat vertically or transversely, or whether the application be from left to right or from right to left is, in my opinion, not a matter of importance. The application should be made in the direction in which the most comfortable apposition is to be had. There is danger, too, in locking the approximating clamps too tightly. Not only may the serous surfaces be thus unduly traumatized and the formation of post operative adhesions, which always carry the possibility of causing a kink, be favored but the blood vessels and the mucous surface may be injured and the production of small ulcers in the neighborhood of the anastomotic line be promoted. The too tight application of clamps is particularly apt to take place in patients with thick abdominal walls and in those whose stomachs for any reason are not readily drawn into the abdominal incision. The strong and constant tendency of the stomach wall to pull itself out of the grasp of the clamps forces the surgeon almost necessarily to tighten them. In such cases, too, the occluded fold of stomach is usually not sufficiently ample to permit the making of an opening of adequate size. Coffey's method of anastomosis without clamps is the procedure of choice here.

Personally I use the four-row method of suturing. I am not to be understood as criticizing in any way the five-row method. I regard it merely as unnecessary. I have not yet seen any alarming post-operative bleeding follow the four-row method. The slight bleeding that is occasionally seen after gastroenterostomy is usually readily controlled by a gentle lavage of the stomach with hot water containing the commercial solution of adrenalin chloride in the proportion of one drachm to the pint of water. Even this I have had occasion to use but once.

The treatment of chronic duodenal ulcer by gastroenterostomy after thoroughly infolding the ulcer and protecting it with omentum is so satisfactory in the very great majority of instances that it must, at present, be regarded as the operation of choice, except in those cases in which hemorrhage is a prominent symptom; in these, either excision of the ulcer or pylorectomy should, as a rule, be done. But judgment should be used in the matter. Pylorectomy and even simple excision in patients with fat or very muscular abdominal walls and in those with the so-called male type of duodenum are difficult operations and increase markedly the operative risk. Some duodenal ulcers lend themselves very readily to excision and should be excised, but excision should always be followed by a gastroenterostomy, a Finney gastroduodenostomy or some such procedure as that recently proposed by Balfour. Even in simple cases, blocking the pylorus adds to the risk of operation and, in my opinion, has not sufficient advantages to compensate for the added risk. As a matter of fact, in the unusual case the decision as to what operation should be done must be left to the surgical judgment of the individual operator. It is not to be denied that hemorrhage as well as other symptoms of ulcer may recur after infolding and gastroenterostomy, but I believe that this holds true of a relatively small proportion of cases and that in many instances the recurrence is due to an absolute neglect of the late post-operative treatment. I am not at all in agreement with those who hold that patients who have been operated on for duodenal or gastric ulcer should quickly return to their usual habits of diet and living. Flint has shown that the healing of the mucous surfaces of the anastomotic opening never takes place under two weeks. It seems to me, then, only a matter of wisdom that patients who have undergone this operation should be held on a fluid or a very soft diet for that length of time at least. We should remember, too, that a duodenal or gastric ulcer represents only a very advanced or the end stage of a pathologic process and that in removing the ulcer we do not remove its cause; consequently

we should, through suitable diet and through the exhibition of alkalies, strive to lessen or overcome the coexistent hyperacidity. Hot foods, irritating foods, alcohol, etc., should be forbidden. It is unfortunate but true, however, that physicians order much while patients follow little. In addition, we should search for and remove any possible focus of infection. My experience, though relatively limited, does not lead me to agree with Moynihan, who thinks, if my recollection is correct, that a diseased appendix or gall-bladder is often the possible cause of duodenal ulcer. In twenty-five recent cases of duodenal ulcer, I found the appendix diseased in only five instances; it was entirely normal in the other twenty. I believe that the source of infection in most cases of gastric and duodenal ulcer is elsewhere than in the peritoneal cavity. The nose, the throat, the sinuses, the mouth, the ears and all possible sources of infection should be examined and, if diseased, have suitable treatment.

The treatment of perforated gastric and duodenal ulcers is closure of the opening by suture or by a plug of omentum. In an occasional case excision of the ulcer is possible. The closure must be accomplished early after perforation, if we are to expect happy results. Every hour after the fifth or sixth adds greatly to the mortality. This is a most important fact. For, if we are going to lower the mortality in these cases, we must do it chiefly through driving the importance of this fact into the lay mind and that of the general practitioner. Education is necessary—education of the layman to the realization that sudden, sharp, prostrating pain in the upper abdomen means trouble that demands a doctor; and of the practitioner to the realization that it means trouble that demands not only surgery but prompt surgery. It is the appendicitis fight of former days transferred to more recent times and to another field. Far more truly than in appendicitis does the fate of patients with perforated duodenum or stomach lie in the hands of the man who is first called and that man is usually the family physician. Again, let it be noted that an absolutely accurate diagnosis is wholly unnecessary. It is not imperative to decide whether or not the perforation is in the stomach or the duodenum or the gall-bladder, or whether or not acute pancreatitis or high intestinal obstruction exists, but it is extremely important for the patient and it should be imperative for the practitioner to decide and to decide quickly that he is or is not in the presence of a condition, whatever it may be, that is urgent in its demand for surgery. It is far better to err in the direction of doing an unnecessary operation than in that of withholding a necessary one.

Early closure, then, is the treatment that is to be applied. Thus far all are agreed. But shall we add to this procedure a gastroenterostomy? Shall we drain? If we establish drainage, will it be a local drainage in the neighborhood of the perforation or drainage of the pelvic cavity or both? Now we enter into the field of dispute. It is conceded that, if marked obstruction is present, gastroenterostomy should be done. It must be admitted, on the other hand, that such a degree of obstruction is seldom present, too seldom to have great weight in the settlement of this question. It must be granted, too, that when gastroenterostomy is added, it is added not as a life saving measure or even as a means of lowering mortality. The patient who cannot endure a simple closure can bear still less well closure plus gastroenterostomy; the operation is advocated simply as a preventive of subsequent morbidity and this fact, too, must be remembered and weighed well in our survey of the question for a decision. Deaver believes that gastroenterostomy should be adopted as a routine measure and reports a series of forty-six cases (in all but three of which he did gastroenterostomy as a primary measure) with one death. Alexander has recently reported ten cases with no deaths But we are not all Deavers with his marvelous deftness and wonderful speed. Personally, I do not believe in making gastroenterostomy a routine procedure here. Despite the fact that some statistics seem to indicate that it does not add to the mortality, nevertheless, I cannot but feel that in many instances and in many hands it may do so and may also increase the chance of infection. A very large proportion (50% of the Massachusetts General Hospital series) of those patients who recover after simple closure of the opening recover fully and permanently and live afterwards with no digestive disturbance provided that even semi-sensible care and discretion are practised. In those who are unfortunate enough to have later symptoms a gastroenterostomy can be done, if necessary, with far less risk and far more ease

than as a primary measure. If done as a primary measure, it should be regarded not as a routine but as an exceptional procedure. The mortality of perforation is very high in those after middle life and consequently in middle aged and older patients, primary gastroenterostomy should be done only as a matter of necessity.

Shall drainage be instituted in patients operated on for perforated ulcer? At the very beginning of my remarks on this phase of the general subject I want to go on record as favoring drainage, both local and suprapubic, in every case. My reasons for this opinion are these: Admitting, as I do, that in many early cases the exudate is the result of the chemical irritation of the peritoneum by the escaped gastric or duodenal contents and that it is not always infected, I cannot conceive how anyone can tell when the exudate ceases to be the result of irritation only and becomes the expression of irritation and an added infection. At the Boston City Hospital cultures were made from the exudate in thirty-four cases of varying duration. Twenty were sterile and fourteen showed a bacterial growth. Five cases were closed without drainage and one of these died of general peritonitis. At operation six hours after perforation diplococci have been found in both the lower and the upper portion of the peritoneal cavity, when cultures from the ulcer itself were sterile. Alexander has found diplococci in a case operated on as early as four hours after perforation. Now, it is not possible to tell by inspection whether infective organisms are present in the exudate or not; if they are present, no man can measure their virulence or estimate the degree of resistance of the individual patient. In other words, we cannot know very much about the matter, and not to drain is to gamble. Correctly placed drainage will aid nature in her fight against possible infection and should, in my opinion, always be instituted. It is to be noted also that subdiaphragmatic infection causes a large percentage (25% in the Massachusetts General Hospital series) of the deaths after operation for perforated ulcer. While local drainage will not, of course, entirely prevent such infection, nevertheless, I feel that it will lessen the frequency of its occurrence.

The subject of gastric cancer is from many points of view very discouraging. Perhaps its most discouraging feature is the very late stage at which the disease reaches the surgeon. No more striking comment can be had than the fact that of 527 cases coming within the past few years to several large New York Hospitals, in only 98 of the 408 operated on was an attempt at a radical operation considered justifiable. We all know that many cases of gastric cancer have no early symptoms of sufficient severity to send the patient to a physician and that such cases will always reach the surgeon at a late stage. The remarks already made on the value of public education as a means of diminishing the mortality of perforated ulcers apply with just as much and perhaps more force to gastric cancer. We must make the public realize that, while there may be such a symptom as chronic dyspepsia, there is no such disease and that digestive symptoms not quickly relieved by ordinary measures should be treated by physicians and not by friends. An early radiographic examination should be made in every case with stubborn digestive symptoms. This is at present our best means of early diagnosis of gastric cancer. There is no lack of unity in our ideas as to what should be done in this disease. When it is removable, it should be removed. Even when there is but little or no hope of permanent cure, when all the possibly involved glands cannot be removed, nevertheless as complete a removal as possible of the growth should be attempted, if in the surgeon's judgment a sufficient period of relief from symptoms may thus be secured. The adoption of the two-stage operation has lowered the mortality appreciably. In some cases preliminary jejunostomy may be indicated but certainly only very occasionally. Gastroenterostomy alone has no place in the surgery of gastric cancer except as a means of temporary relief in obstruction of the pylorus. We have all been occasionally surprised by observing the cure of an apparently malignant pyloric tumor through gastroenterostomy. Such pleasant surprises, however, are rare in surgery.

Thalhimer and Wilensky have recently published a study of specimens of gastric cancer removed at operation. The results of their studies is somewhat encouraging to the surgeon who has to deal with gastric cancer—a field wherein even a little encouragement is pleasant. Unfortunately the application of their conclusions touches only a limited field in practice. These investigators found that localized carcinomata situated elsewhere than at the

pylorus very rarely extended microscopically more than one cm. beyond the macroscopical limits of the tumor. In other words, the malignant process is of limited extent. Of course, this fact avails us little, if glandular metastasis is present. It may encourage us to excise some limited growths of the cardia for which gastrectomy would otherwise have to be attempted or else no operation done. It may, too, give us hope that we have got beyond the malignant process in some specimens excised as ulcers which the microscope later shows to be malignant.

The opinions which I have advanced in this paper are based upon my total experience in the field in question and are not the result entirely of my experience of the past year which, however, was sufficiently interesting to prompt me to use it as a text.

A total of fifty cases of gastric and duodenal disease came under my observation in 1917; thirty-six of these represented non-malignant conditions; ten, malignant conditions, and four, immediate and late post-operative sequelae having no relation to the pathology of the disease. Of the non-malignant conditions, twenty-seven (over 50% of the whole) were duodenal ulcers, seven, gastric ulcers (including one hour-glass stomach), and two were ulcers of both the stomach and duodenum. For the relief of duodenal ulcers posterior gastroenterostomy with infolding of the ulcer was done twenty times; at the present writing results are excellent in sixteen and fair in two cases; two patients died as a result of operation. In two cases excision of the ulcer and a Finney gastroduodenostomy was done with one excellent result and one death. Excision of the ulcer and gastroenterostomy was done in one case with an excellent result. Simple closure without further operation was done in one case of chronic ulcer which had perforated into the liver and in one case of acute perforation; both cases recovered and remained well. In the two cases of ulcer both stomach and duodenum the Rodman operation was carried out with excellent immediate and remote results. In the treatment of the seven gastric ulcers "sleeve" (midgastric) resection was done in three patients, all of whom have remained very well; in two (one of whom showed an ulcer in the greater curvature), excision without gastroenterostomy was done; one patient died and the other remains well. for an ulcer on the posterior wall transgastric cauterization and suture was carried out with an unsatisfactory result, all symptoms recurring in eight months. An unsatisfactory result also followed operation in a case of hour-glass stomach for which a gastroenterostomy (after the Finney method of gastroduodenostomy) was done; the symptoms recurred in ten months and, two months ago, I did a "sleeve" resection with an excellent result thus far.

During the past year I met with two cases of duodenal fistula following operations on the gall-bladder. One occurred almost immediately after operation and the other, strangely enough, did not appear until more than four weeks after the primary operation and ten days after the incision in the abdominal wall had closed. These cases and one of persistent vomiting after a gastroenterostomy I saw in extraurban hospitals and all cases were in a pitiable condition. I believe that it was poor surgical judgment even to attempt operation; but I did operate, hoping against hope. All three cases died.

Of gastric cancer the oft repeated story is again told in this series. Of the ten cases which I saw in hospitals in the past year not one was really suitable for the radical operation. I attempted and did a Polya operation in one case in which I knew I could not remove all the glands; this patient, after four months of comfortable life, died two months later of recurrence. Five cases I have explored and had to be satisfied with making a gastroenterostomy in three and with doing no operation in two. Of the three cases in which I made a gastroenterostomy, one is still living comfortably six months after operation; another lived comfortably for four months, and the third upon whom I operated simply to relieve the persistent vomiting, died after four weeks of comfortable post operative existence, which gave great satisfaction to him and to his family. Four cases were so evidently non-operative that not even an exploratory operation was done; three of these cases died a few days after coming to the hospital.

Now, we do not expect particularly good results in the surgery of malignant disease of the stomach and mine were no exception to the rule. Nor can my results in this particular series of benign disease be in any way construed as brilliant. Let us consider these results a bit further. I know of nothing more

destructive to false pride and of nothing that can be a greater stimulant to honest pride than an analysis of one's results after the method of Codman of Boston. Those of you who have received his strikingly unique and brilliantly original hospital report know what I mean. He bares his surgical soul to the public and to the profession and, I believe, points the way along the road that we all must travel in time. Taking up my burden to follow him, let me first consider the deaths resulting from operations on benign disease.

My first death followed a simple gastroenterostomy for chronic duodenal ulcer in an emaciated woman, 38 years of age, with a very marked degree of ptosis. She began to vomit soon after operation and continued until she died one week later. She lived thirty miles out of Boston and, when I saw her six days after operation, the dilated stomach stood out very prominently in her abdominal field. She absolutely refused gastric lavage, change of position, stopping of fluids by mouth and protocly sis, said she knew she would get better, and died. Now, how shall we charge up that death? Personally I think the evidence favors the finding that in some way a kink took place after operation and that her death was due—I use Codman's terms now—primarily to an "error due to lack of technical knowledge or skill" and secondarily to "the patient's refusal of treatment."

My second death occurred in a man, 57 years old, with a most indefinite history of gastric symptoms for a period of ten years. He had a huge duodenal ulcer for which I did a gastroenterostomy with infolding. He did perfectly well and ran a flat temperature and pulse chart for six days, when he suddenly shot a temperature and vomited a few times. In a few hours the temperature disappeared, all symptoms ceased, and he ran a normal chart with a pulse of 60 for three days more when he again shot a temperature (102.4°) and again vomited. He lived fifty miles out of Boston and on his second flare-up I advised his local surgeon to see what the trouble was. He opened the wound and drained a "subphrenic abscess." The patient died fourteen days after the primary operation. Again, how shall we classify this death? I do not know wherein I failed, but either my assistant or I probably committed an error of surgical technique sometime during the operation; but, if we did, why did the patient not give signs of trouble until the sixth day, particularly when the infection was located in a region so rich in lymphatics. Of course, it is possible that infection took place by way of the lymphatics after operation and that the operation itself had nothing to do with the result.

Pneumonia caused my third death. It happened in a fine middle-aged man whose duodenal ulcer I excised, following the excision with a Finney gastroduodenostomy. He developed a right-sided pneumonia, from which he was recovering nicely, when the left lung became involved. He died on the thirteenth day after operation. A skilled anesthetist gave the ether and I must classify this death under the "calamities of surgery or those accidents over which we have no control."

My fourth fatal case happened in a man of 49 who had been having dyspeptic symptoms for fifteen years and who for some months before operation had been failing rapidly. I found a large ulcer on the vertical portion of the lesser curvature, excised it and drained the lesser peritoneal cavity. This man whom I did not see after operation but who was in charge of a most capable physician "just petered out" and died in four days. There was no sign of hemorrhage or of infection. I must divide the responsibility for this death between "error of surgical judgment" on my part and "the patient's poor condition."

The deaths in the series of malignant cases were all due to "the patient's unconquerable disease."

Now as to errors of diagnosis. In this series of fifty cases there were seven errors in diagnosis. In two cases of chronic duodenal ulcer the pre-operative diagnosis was gallstones. Curiously enough both of these patients were at the Carney Hospital. In another case of duodenal ulcer, pyloric cancer and, in still another, beginning high obstruction of the small intestines were the pre-operative diagnoses. One case of chronic gastric ulcer was operated on under the diagnosis 'chronic duodenal ulcer' and another under the diagnosis 'chronic duodenal ulcer (?).' In a case of chronic appendicitis a chronic gastric ulcer was unexpectedly found on the greater curvature of the stomach. All but two of these errors in diagnosis were made in extraurban hospitals, when I had to make a prompt working diagnosis from a rapidly taken clinical history.

None of the errors were gross nor were they serious in any way.

Gentlemen, I have been to confession to you tonight and confession always chastens the spirit. We all have ideas on subjects and in fields that interest us, but, to paraphrase a sentence of Claude Bernard, we must so hold those ideas as to be willing always to submit them to facts and be ready to modify and even abandon them, if our observation of facts points convincingly in that direction. Results are facts and to results we must submit our surgical ideas, if we hope to advance surgically.

Selected Papers.

SPEECH-READING FOR THE WAR DEAF.

BY CLARENCE JOHN BLAKE, M.D., BOSTON,

Professor of Otology, Emeritus, Harvard University; President, Ninth International Otological Congress.

(Concluded from page 700.)

III*

To the teachers of speech-reading who are to be definitely employed under government direction and to those who, later, contribute by voluntary effort toward the re-establishment of the deaf soldier in civic life, some knowledge of the conditions creating their opportunity will be worth while, and the following extracts from official medical reports, comprehended in this communication, may serve as a basis for a better understanding of the corrective work soon to be in process.†

As to the number of cases of impairment of hearing among the wounded, the reports from different war areas vary considerably, and there is not as yet the time for comparison and conclusion, the number of ear cases to the total sick at one of the fronts, and in the evacuation hospitals, being considerably larger than the number evacuated to the rear, sixteen per cent. in the first list and four and one-half per cent. in the second list. Under present knowledge, and purely as a tentative estimate, the number of cases of auditory disability among the wounded returned to this country may be placed at a minimum of four and seven-tenths per cent., exclusive of psychopathic cases.

It is evident, therefore, that the teaching of speech-reading may be variously applied to meet the demands of individuals, and this fact is comprehensively recognized in the plans already made by the Department for Reconstruction of the Defects in Hearing and in Speech of the Surgeon General's Office in Washington.

The term "war deafness" has a wider and a deeper meaning in this colossal and demoniac war than in any war which has preceded it, for not only are there greater numbers of men engaged in the actual contact of strife, but new and hitherto unconceived factors have been brought into the struggle, and earth and air and water have been invaded in the effort to maim and to destroy the most delicate and the most costly mechanism with which man seeks to employ and to perpetuate his intelligent and rightful existence.

The mad autocratic rush for breech-loading small arms, which signalized the defeat of the Austrians and South Germans by the Prussians at Sadowa, has since been gigantically paralleled by the investigations instituted into the production of high explosives, with reference to their application to military use as well as for their needed service to commercial and constructive ends.

Nowhere was this study more carefully and more ardently pursued than in the cubicles of the chemical departments of the manufacturing establishments which ministered to the expansion of German overseas trade, stimulated by that virus out of Brandenburg, which, within three months after the capitulation of Vienna, in 1866, had set the Prussian lieutenants and non-commissioned officers at work drilling the defeated and sulky South Germans in the vigorous exercise of the goose-step and the handling of the needle-gun. As the drilling and the hardening process of heartless and calculative discipline progressed, to the extinction of human individuality and the production of a coercible mass, the production of chemical by-products to be stored for misapplication went on, the dye industry of Germany assumed gigantic proportions, and beneath the shimmering camouflage of dainty device and witching color lurked and labored the subverted servants of the Prussian State.

In studying the question of war deafness as concerns both its causation and the remedial and compensatory measures to be employed, it

* Volta Bureau, Reprint No. 241.

† Section of Otology, London, February, 1917, N. J. Marriage, Pres. L'Organe de l'Audition pendant la guerre. E. J. Moure. P. Pietra. *American Journal Medical Sciences.* American Laryngological, Rhinological and Otological Society, August, 1918.

is important to recognize the fact that in all men entering military service there is a certain proportion already, previously, the subject of some form of aural malady, most commonly a thickening process in the mucous membrane, with consequent decrease in mobility of the sound-transmitting apparatus of the middle ear, or else destructive changes incident to such suppuration as often accompanies the exanthemata of childhood, especially scarlet fever.

In many instances these conditions affect the hearing only moderately, and the candidate for military service passes the customary whispered-word test without detection of a disability, but the local condition is one, in both these classes of cases, which renders the subject more liable to aural injury or disease than would otherwise be the case.

The immobilization of the sound transmitting apparatus as the result of intratympanic thickening and adhesions and of limited anchylosis of the ossicular chain impairs its elastic protective value to the labyrinth, in the event of sudden aërial concussion, and at the same time renders it more liable to a solution of continuity of its own structure, while in the case of the cicatricial substitutes for the original vibrating membrane their ready rupture under concussion opens the way for exposure of the tympanic cavity to the recrudescence of a suppurative process.

The present system of trench warfare, with its incident exposure to wet and to cold, favors the recurrence of catarrhal and suppurative processes in the middle ears, and the concussive effect of exploding bombs and shells sometimes ruptures the thin-scar tissue, which has served to close a perforation in the drum-head, incident to suppurative disease in childhood. An incident of this sort was presented in a captain of artillery of the Canadian contingent, who suffered the loss of hearing of the left ear at Vimy Ridge in consequence of a close shell explosion, there being no sensation of pain, no dizziness or loss of consciousness, but only a sharp, metallic sound, lasting for a couple of days, and later a thin bloody discharge. As a child he had suppurative disease of both middle ears with perforation of both drum-heads. The suppuration had subsequently ceased and the perforations became closed by the usual thin-scar tissue, composed of the outer dermoid and inner mucous coats, the firm interlay of fibrous tissue being never reproduced. On examination I found a large oval perforation, including almost the whole of the posterior half of the drum-head, with a few remnants of scar tissue; the thin tissue had ruptured easily and painlessly, apparently not as the result of the percussive effect of the shell explosion, because the edges of the perforation and, consequently, the scar tissue was in contact with the inner wall of the middle ear cavity, but by the subsequent successive effect of the shell explosion. Under stimulation of new cicatricial growth the injury was repaired and the hearing restored. Marriage makes mention of the possibility of a return movement of the wind waves, which may be termed the successive effect of the shell explosion, and which is exemplified on a larger scale in cases of major injury, one example being that of a soldier standing at the entrance of a dugout ten feet square facing a dump which was suddenly exploded by an enemy shell, the soldier being blown violently against the rear wall of the dugout and then sucked back to the entrance with a fracture of an arm and a leg but otherwise uninjured.

Where rupture of the intact drum-head occurs, this is a matter of more violence exerted either upon the drum-head itself by aërial concussion or by shock communicated through the bones of the head from a violent impact, of which a blow upon the head with rupture of the drum-head of the opposite side, the familiar *contre coup*, is an example.

If the drum-head remains intact under considerable aërial pressure, its excessive excursion, transmitted through the chain of bones to the labyrinth, is liable to exert disruptive effects in that delicate structure, and permanent loss of hearing with more or less protracted vertigo and instability may result. If the drum-head ruptures, the labyrinth more commonly remains intact, and the rupture of the drum-head often follows the line of the attached hammer bone in an irregular tear, the irregular edges of which, glued together by the clotting of the resultant bleeding, speedily heals. In deference to this fact the more recent orders in reference to bleeding from the ears from gun fire or from bomb or shell explosion, incident to fighting at the front, results in the sending of these cases to the rear with the ears stopped with absorbent

cotton for examination and treatment under hospital conditions. In some cases instead of rupture of the drum-head there is hemorrhage into the middle ear or into the tissues of the drum-head itself, these phenomena being analogous to those which are sometimes found in aviators under conditions of rapid changes in altitude.

Taupiquet reports a large number of cases of injury from proximate shell explosions, but the number of instances of implication of the internal ear was small. Of 164 cases in one group, for instance, only 26 were instances of concussion of the labyrinth with or without lesion of the middle ear. The cases of injury to the middle ear without labyrinthine complication the author divides into three classes: those in which a purulent otitis media is the immediate sequence of the injury, with a destruction so extensive as to obviate the possibility of differentiation in degree; those in which there was evident a fresh perforation or extensive rupture of the drum-head, with free bleeding, tendency to coaptation of the irregular edges of the ruptures, and spontaneous healing without middle-ear infection; in cases of infection, however, this evidenced itself usually within the first two or three days. Of the 24 cases of this class 18 were infected. In the third class of cases, 32 in number, the lesion, evidenced on objective examination, was not a perforation, but a condition, similar to that sometimes found in aviators, of varying degrees of middle-ear hemorrhage, with occasional blood blisters, usually in the upper portion of the drum-head, where the blood vessels are more numerous and larger. These hemorrhagic lesions gradually disappeared and within a few days the drum-head was again normal, unless the strain and injury to the implicated tissue had been sufficient to cause sloughing and perforation. This secondary result occurred in 20 of the 32 cases in this class, the time of its appearance being from three or four days to a fortnight after the injury, the appearance of the perforation, circular or lenticular in shape and with rounded edges, differentiating it from the primary rupture or tear across the drum-head.

Raujard in the study of the varied results of auditory implication from shell fire differentiates between the organic and neuropathic cases without reference to middle-ear participation, regarding as organic those cases in which the ultimate acoustic vibratory apparatus, the organ of Corti, is really injured and as neuropathic those in which the auditory function is merely inhibited. In the organic form there is, either with or without middle-ear disease, evidence of labyrinth concussion or auditory neuritis, while the true neuropathic deafness is usually accompanied by mutism, is bilateral and complete for all sounds, and is not accompanied by evidences of vestibular disturbance; but since these symptoms may occur in some cases of organic deafness the differential diagnosis cannot always be immediately made, and the elements of time and the effects of psychotherapy and of re-education must come into consideration. In this connection the observations of Lannois and of Chavaune are of interest, who reported in the *Lyon Méd.* of February, 1916, the examination of 1000 soldiers, in 645 apparently total, or nearly total, deafness dated from an aërial concussion, without direct traumatism, all but 2 per cent. recovered, and these were left permanently deaf in both ears.

Wilson in reporting on the effect of high explosives on the ear reports that 200 patients exhibiting nerve symptoms were examined by him at periods varying from within 24 hours to one week after the injury, and of this number 50 complained of deafness in varying degree. Seventeen of the 50 cases gave evidence of injury to the internal ear as the result of the explosion. In the remainder the deafness in many instances had been merely temporary and there had been no disturbance of equilibrium in the cases of persistent impairment of hearing. This was found to be due in some to extralabyrinthine causes, the result of an old middle-ear suppuration or an occlusion of the external canal. Of the 17 cases, 6 had definite middle-ear trouble before the concussion; of the remaining 11, with no previous history of ear trouble, 6 had evidences of a recent perforation of the drum-head, and 12 complained of vertigo and gave demonstrable signs of disturbance of equilibration. In regard to the character of the injury in these cases and the treatment to be employed, the author concurs in the general opinion deduced from the existing imperative opportunity for observation, and emphasizes the importance of complete rest and recumbency for a period of

at least ten days after the injury, and that more immediate removal to a base hospital is liable to retard recovery by the injurious effects incident to transportation.

Marriage divides cases of concussion deafness into two classes: those the result of continued explosion of guns firing day after day and those consequent upon the bursting of a shell filled with high explosive in the immediate vicinity of the patient; the former belong usually in the class of results similar to those observed in foundrymen, machinists, boilermakers, and civilians engaged in corresponding occupations, and there is usually persistent deafness in a moderate degree if the soldiers have been long exposed. The deafness due to shell explosion is generally very extreme for a short time and is sometimes accompanied by unconsciousness. In one instance the author saw a shell burst just behind a lieutenant without wounding him, but rendering him completely unconscious for an hour. When he recovered consciousness he noted marked deafness in both ears and intense headache, but no subjective noises and no vertigo, nor was there, either at the time or later, hemorrhage or discharge from the ears. Four days later he heard the spoken voice two feet away from each ear, but high tones, as represented by a loud-ticking watch, of three and a half or four feet normal distance not at all; with the tuning-fork both air and bone conduction were much subnormal, the former, however, being better than the latter; both drum-heads were practically normal; 18 days after the explosion the hearing had become normal.

The treatment adopted by the author in these cases is rest in bed, bromides in the early stages, and later strychnin. In the matter of prognosis, time is the best consultant; if marked improvement has not been made within six to eight weeks the prognosis is bad, and even when the hearing returns subjective noises often persist. In default of an opportunity for postmortem examination, it may be inferred that the seat of the concussion injury is chiefly peripheral, as in the cases under observation. The deafness was rarely associated with rupture of the drum-head, which is in accordance with the generally accepted view that rupture of the drum-head lessens the concussion effect in the middle-ear; in very severe concussions there is the possibility of concomitant central injury, such as hemorrhage into the brain substance. Psychical deafness as the result of shell shock is usually binaural and occurs usually in cases in which the shock has been especially severe, as, for instance, being buried by a shell without visible evidence of injury. The deafness is usually absolute, there being no hearing either by air or bone conduction, and it is usually accompanied by other nervous signs and symptoms, loss of voice, narrowing of the field of vision, tremors, irregular paralyses, and areas of anesthesia; spontaneous nystagmus is absent.

Marriage agrees with Milligan and Westmacott that in these cases there is a temporary suspension of neuron impulses from the higher cortical cells of the central nervous system to the periphery, their view being that the hiatus or synapse interfering with the flow of nervous stimuli is a central and not a peripheral one, for the reason that in so many of the cases of sudden blindness and sudden deafness no trace of any organic lesion, peripherally, was to be found, and, moreover, the rapid recovery of a large proportion of the patients was a strong argument in favor of the supposition that none had occurred.

Mr. A. Cheatle is quoted as reporting two confirmatory cases, one that of a private, who during a bombardment suddenly became unconscious without any definite assignable cause, and so remained for two days, and on recovering consciousness was found to be completely binaurally deaf, without vertigo and without objective evidence of an aural lesion, but for the period mentioned he could not hear the loudest shouting or even his own voice. The vestibular reaction to cold was normal.

The second case was that of a Belgian soldier blown from his bicycle in the retreat from Antwerp and completely deaf in both ears, aphoric, and paralyzed in his left arm and leg from that time up to July, 1916; in this case rapid recovery ensued upon electrical applications, previous forms of treatment, including hypnosis, having failed. The difficulty of distinguishing this form of deafness from malingering is often great, but can generally be accomplished by a thorough examination of the malingerer, who is usually sullen and defiant and fully conscious, being at some time during the tests revealed in his true character, while

the patient with psychical deafness has the signs and symptoms of a nervous breakdown. Among the experiences of other observers the author reports some of especial interest. Two, for instance, which under different causative conditions exhibited similar results. One seen by Mr. S. Hastings was wounded on the right cheek by a bomb; when examined 18 days later the manubrial vessels were injected and the tympanic cavity evidently filled with blood; the Politzer acoumeter was heard at a distance of two inches; the Rinne test was negative and the bone conduction normal. Six days later bubbles were seen in the hemorrhagic contents of the tympanum and the hearing materially improved, while at the end of a fortnight later the fluid in the tympanum had disappeared, the drum-head was somewhat retracted, and the hearing for the acoumeter was three feet.

Mr. A. Cheatle also reports a case of hemorrhage into the middle-ear due to a parachute descent, the airman, 21 years of age, having descended 13,000 feet in four minutes. The only ill effects of this rapid change of air pressure were impairment of hearing, a feeling of fulness in the left ear, and a sensation of crackling on yawning. The left middle ear was found to be filled with blood, with an intact drum-head; the hearing was but slightly decreased. Nothing was done in the way of treatment, and at the end of a month the blood had disappeared and the hearing became normal.

The majority of the cases of ruptures of the drum-head or its representative scar tissue are the results of proximate explosions, and come therefore mainly from the front as a consequence of exposure to shell fire and to the variety of bombs, hand, rifle, and trench mortar used in attack and defense at immediate contact, while in actual bodily conflict injuries to the head are frequently accompanied by ruptures of the middle-ear sound-transmitting apparatus and dislocations of its integral parts.

Another and very different cause of deafness in warfare, and one demanding protracted consideration, is that which comes from long-continued exposure to the sound and aërial concussion of heavy gun fire. The subject of impairment of hearing as the result of prolonged exposure to loud noise has found its more intimate support in physiological experimentation only within a few years, and that by a series of investigations made by individual observers, but often in collaborative relationship, their purpose being the exact determination of the effects produced in the acoustic labyrinth as the result of subjection of animals to the continued influx of loud noises of different kinds, the consensus of opinion being that the injury to the acoustic labyrinth, with subsequent degeneration of the affected portion and the causation of a permanent impairment of function, is the result of the continued impact of the sound waves conveyed through the medium of the air and not through the body. These patients often hear the human voice better in the presence of a noise, but in quiet surroundings would be mainly dependent upon speech-reading for their appreciation of conversation.

IV.*

In view of the diversity of degrees of impairment of hearing to be expected in the war deaf and the importance of estimating, and of compensating, for this particular disability when it is but one of other concomitant injuries, it is evident that the instruction in speech-reading should be under the direction and control, firstly, of the General Medical Staff; secondly, of the medical staff of the hospital, or other institutions, in which the teaching is applied; but it is also evident that this teaching, in order to achieve its highest physiological, as well as its most immediate practical value, should stand in a class by itself like the vocational training! not a part of the hospital treatment of the disorder from which the patient is recovering, but the first step toward the resumption of the individual place in civil life.

A review of the reconstruction and rehabilitation plans of the medical departments of our Allies emphasizes the importance of the distinction between the hospital treatment proper and the educative rehabilitation treatment, which, while it may begin in the hospital ward, is distinctly a pedagogic process and should be mentally differentiated as such, since, when so regarded, it becomes a stimulus to the effort to get into the competitive activities of existence again.

For these reasons, as well as for advantages

* Volta Bureau, Reprint No. 245.

in administration which are self-suggestive, the teachers of speech-reading for the war deaf, whether men or women, whether working in hospitals or in established speech-reading schools, should not be classed with nurses or be under the direction of nursing superintendents, except in so far as the observance of hospital rules or the welfare of the individual patient is concerned, the teaching of speech-reading being essentially of educative purpose, capable of initiation in individuals still under hospital treatment but to be regarded as the helping hand which is to lead onward and outward and to continue its guidance in civil life so long as it may be needed.

The appreciation among the adult community deaf of the value of speech-reading is rapidly growing in this country, and the establishment and rapid enlargement of private speech-reading schools is an evidence of this; there is, moreover, a growing understanding of the isolation which deafness entails and of the peculiar mental depression which not infrequently accompanies it. To combat this, there are being formed clubs and associations not merely for practice in speech-reading, but for mutual association in good works and in the installation of that spirit which recognizes in a handicap a possible helpful stimulus rather than a mere hindrance.

The Speech-Readers' Guild in Boston is a primal example of this and one in which our war deaf, after their discharge from hospital, will always find a sympathetic, an appreciative, and a hearty welcome, since it will be one of the privileges of this and similar private institutions in other parts of the country thus to supplement and continue the rehabilitation work begun under government control.

That some such opportunity for supplementary training in speech-reading should be one of the means by which those similarly afflicted in civil life can express their gratitude to their defenders who have, with much of the same sort of courage and purpose as that which took them abroad, again come among us to take up the activities which they have helped to conserve, but under, to them, greatly altered and more difficult conditions; it is not only for the practice in speech-reading that such an opportunity for our war deaf is advisable, but also for the purpose of continuing that urge to friendly converse, that kindly human touch with one's fellows which the deaf, enclosed in a vaguely silent world of their own by a transparent invisible wall, so greatly need.

To the extremely deaf, the victims of auditory concussion, as distinguished from the so-called cases of "shell shock," a vague term of modern origin applied to a series of manifestations of other than merely commotional origin and coming properly under the domain of the neuropsychiatrist, who do not hear the sound of the individual voice, or in part only, or considerably altered in portions of its scale, one of the remnant results in many cases of injury to the labyrinth, the speech of the patient either conforms partially to his remnant of hearing or becomes an entirely mechanical process, semi-articulate, unnaturally harsh, and discordant or lowered to a sibillant simulation of a voice, and in all these guises a deterrent to those who would endeavor to communicate with him.

Cases of this kind require not only long and persistent speech-reading and speech-producing training, but also subsequent opportunities for an occasional drill in articulation, because the effort to produce adequate speech, unaided by the hearing of one's own voice, is even more productive of fatigue and discouragement than the effort to understand the spoken word through the medium of sight alone.

As a matter of practical experience it has been found that among the most successful teachers of speech-reading are those who have been obliged to become dependent upon this means of understanding the spoken voice, because of their own impairment of hearing, and this success seems to have a two-fold reason, the first being the sympathetic appreciation, born of a similar experience, and the intimate understanding of the difficulties in the way of the pupil; the second being the customarily more careful formulation of the speech equivalents upon the part of the considerably deaf than upon the part of the considerably hearing teacher.

To all teachers of speech-reading this matter of clear, flexible, defined and at the same time unforced articulation is a matter of great importance, and it may well be included as a part of the curriculum in the normal schools for the instruction of teachers for the adult deaf. In teaching the adult deaf the equable, well-articulated speech is especially important

for several reasons, these pupils have long been accustomed to watch the face of the speaker and, if the deafness has been slowly progressive, have increasingly tried to construe the movements of the lips; a forced movement is to them, therefore, suggestive rather of distortion than of emphasis, and is correspondingly confusing. To adults having already established habits of thought of their own, concentration of observation is often fatiguing, and the more even the instruction in its repetition of form the more easily is it acquired, and, still further, the mentality is less plastic to an initial impression, in many cases, in the adult than in the youth.

In this connection the statement of Dr. Frederick H. Sexton, Vocational Officer in the Quebec and Maritime Provinces, Military Hospital Commission, may be had in mind as bearing upon the coming work of the American teachers of speech-reading to the deaf.

"These men are not the same men who sailed away on the transports to France and Belgium. . . . The pitiless horror of 'No Man's Land' and the terrific nervous strain of the modern artillery bombardment has marked their minds, one and all. In the trenches the men are said invariably to show the lines of strain upon their faces and to give the appearance of being five to ten years older than they actually are. Even the long period of loving care in hospitals in England has not erased all the evidences of mental stress and strain. Whether or not there is any general permanent impairment or modification cannot yet be decided definitely.

"There is no doubt, however, that the average returned soldier is mentally sluggish and sub-normal. He does not react as truly and as quickly to ordinary stimuli as he did before enlistment. He is more erratic and cannot concentrate upon any one task or pleasure for long. He cannot fit into the humdrum life of productive industry with its demand for continuous effort throughout the long working day without a severe process of adjustment. These are the effects of military organization itself, as well as the particular results of battle."

It is very evident to the informed mind that beyond the achievements of medicine and surgery, the salvaging of orthopedics and the ministrations of nursing care, the vocational rehabilitation of the sick and wounded who return to this country will need the best teaching quality available in special lines, and this latter form of help will need to be continued, in many instances, beyond the period when the patient shall have emerged from hospital environment and begun to take his place in ordinary life.

In reference to the teaching of speech-reading, we are fortunate in having well-established schools and an increasing number of competent teachers, exhibiting willingness, as well as skill and understanding. Carefully selected graduates of normal schools of speech reading have been listed in the Surgeon General's office and either independently or as members of the units of the Reconstruction Service of the Industrial Union for the Deaf, distributed in large population centers throughout the United States, are eagerly ready for service, as their numerous letters of enquiry bear evidence, and prove that it is upon the American women, teachers of speech-reading to the deaf, that we can rely not only for that particular form of instruction of which they are capable, but for the infusion of new courage, the opening of the vision of uplift and of achievement, to the war deaf who are coming home.

Medical Progress

REPORT ON DERMATOLOGY.

BY JOHN T. BOWEN, M.D., BOSTON.

FIVE GENERATIONS OF ANGIONEUROTIC EDEMA.[1]

QUINCKE was the first to describe this affection, in 1882, under the name, "acute circumscribed edema of the skin." He considered it a vascular neurosis and attempted to separate it clinically from all other forms of local edema as a distinct disease. These observations were, however, only a sequel to Milton's work in 1876 on "Giant Urticaria," a new species of affection differing from the several forms of urticaria previously described. The name angioneurotic edema was introduced by Strübing in 1885, and has been the one most commonly employed to designate this affection since that time, although the simpler term "acute circumscribed edema" is preferred by many, as it is held that there is no final proof of its neurotic origin, and it is not confined to the skin. The disease

is not uncommon, Cassirer, in 1901, being able to collect from the literature 160 cases, and many more have appeared since. As is well known, the disease is characterized by acute massive swellings of the skin, and sometimes of the mucous membranes or of internal organs, which develop and disappear with great rapidity, leaving no trace behind them. It has a marked tendency to recur, and is often associated with other neuroses, and it seems to be more or less related to uticaria and other skin lesions exhibiting local vascular disturbances. It is usually acute and sporadic, but a familial type has been observed in which it seems to be distinctly hereditary and has appeared in several or many members of a family through two or more successive generations. The existence of hereditary angioneurotic edema in this country was first pointed out by Osler. He published the history of a family in which it was present through five generations, and in which 22 members had suffered from repeated attacks of the disease. Later it appeared in two members of the sixth generation.

The cases reported by the writers occurred in a family in which the frequent occurrence of local swellings in various parts of the body is a fact of common knowledge to their friends and neighbors, and a matter of concern to the parents of children who may be affected. Many members have suffered severely through longer or shorter lives, and not a few have finally died from attacks in vital organs. The patient seen was a man nearly 80 years of age, always subject to severe attacks of local edema, sometimes of great extent, developing quickly, disappearing rapidly, and affecting at different times practically all parts of the surface of the body. The attacks have become less frequent in later years. He was never able to associate the attacks with any cause, either dietary, traumatic, or otherwise. The family history began with the father of this patient, in whom the attacks began as a young man, and were eventually fatal after a lapse of about twenty years, through involvement of the throat. This man was the father of ten children, three sons and seven daughters. Though the mother of these children was entirely free from their father's trouble, the malady was transmitted to all of them except one son, and seven of them are said to have died of the disease. Two of the affected nine of the second generation died without descendants; to the remaining seven there were born twenty-nine children, and twelve of these twenty-nine had angioneurotic edema. In only one of the seven groups of children born to these seven affected parents and making up the third generation, were all the children free from the disease. In the fourth generation there are seven known groups of children, with a total of eighteen individuals. Nine of these children are descended from three unaffected parents and are free from the disease; nine are descended from four affected parents and five have the disease; only one of the affected parents gave issue to children who have thus far entirely escaped. The fifth generation contains only six known members up to the present; three are the daughters of an unaffected mother and one of them has the disease—the only case so far observed in the fifth generation.

In this family, from the first to the fifth generation, definite histories have been obtained of sixty-four individuals. Among them there have been twenty-eight cases of angioneurotic edema, and fifteen deaths from an acute form of the disease. That is, of the sixty-three known descendants of the first one affected, 27, or 42.9 per cent., have inherited the disease, and 51.5 of those who have had the disease have died of it. The division has been about equal between males and females.

TEN YEARS' EXPERIENCE OF RINGWORM IN PUBLIC ELEMENTARY SCHOOLS.

John Priestly,[2] Senior School Medical Inspector for Staffordshire, states that after ten years' experience and a close study of ringworm in schools, his impression is that the anxiety that was formerly caused by this condition was unjustified. In those days very little was known of the numerous cases that pursued a brief course without leaving a trace behind. Priestley's experience is based on a country area containing over 80,000 school children scattered over rural or small manufacturing districts. He emphasizes the connection between ringworm and impetigo contagiosa, both occurring at about the same age, being equally infectious, endemic in the country, and appearing as single cases or in little groups. These epidemics in both cases cease, as a rule, as suddenly as they appear, so that it is often a question whether their disappearance is due to the preventive measures taken. Ringworm on the

hairless skin is, as is well known, as easily and quickly cured as impetigo. To illustrate the percentage of cases of ringworm discoverable on the day of inspection during the four years 1909-1912, about five children out of every thousand examined were found on the day of inspection to have ringworm of the scalp. It cannot therefore be said that the head ringworm is a very common trouble in school life. The numbers found on the day of inspection are equal to the number of cases of tuberculosis of all kinds similarly found, and are only one-fiftieth of the cases of pediculosis capitis. The old teaching that scalp ringworm had no tendency to spontaneous recovery is disproved by experience. From the writer's statistics it seems clear that there was more scalp ringworm among the boys than among the girls, after allowance is made for the fact that it is much easier to escape discovery in the latter owing to their longer hair.

The grade of infectiousness seems to be low, and very close contact seems necessary for its spread. It was found not so much in children in the same classes, as in those living in the same street or house. The degree of infectiousness in ringworm was estimated to be much less than that of pediculosis. Roughly speaking, ringworm was always to be found in about one-half of the schools, although in a large majority only as single cases, or in groups of two or three. Epidemics were comparatively rare.

As regards treatment, Priestley considers that it has entered on a new phase since the x-rays were used on the principle that this offers a convenient mode of epilation, which is necessary in order to get at the mycelium and spores. We have now practically the means of completely controlling the individual case, but the drawback is the time required, about two months; and, besides, there is temporary baldness, and, theoretically, the fear of damage to the brain cells. It is also a somewhat costly method. It must also be remembered that ringworm is not a dangerous affection in itself, and that it probably invariably disappears before puberty. To these facts may be added its low grade of infectiousness,—so low, in fact, that with certain simple precautions we need not exclude children from school,—and the knowledge that it is so seldom epidemic. Hence the question legitimately arises whether it is necessary under these circumstances to trouble about the x-rays in all cases,—or whether they may be reserved for the five or ten per cent. of excessively protracted cases. It was found that of 778 cases casually treated (that is, at home, either by physician's prescription or popular or domestic remedies), the average duration was nine months, the minimum within one month, the maximum fifty-eight months, or just within five years. Nearly half the cases were over in six months. The duration of the cases seemed to have very little direct relation to the vigor or completeness of the treatment. The age of the child at the outset did not appear to influence duration in any marked degree, as there were long and short cases at all ages.

With regard to administrative measures, head teachers at once notify of suspected cases, and the medical inspector proceeds to verify at the next regular inspection, the teacher meanwhile treating the case as if it were ringworm, and suggesting that the parents consult a physician. The hair is to be cut short and some simple application, like carbolized oil, used to prevent the hair from flying about. If these precautions are refused or neglected, the teacher is expected to forbid the child's attendance. The caps are of good blue cotton and shaped like polo caps; the bonnets pink or gray and shaped like sunbonnets, and are boiled and washed twice a week. It is extremely seldom that it has been found necessary to close a school.

This method has been in vogue in these schools since 1911, and there has been no change for the worse in the number of cases occurring. Priestley declares that if we were not dealing with an essentially benign disease, the precautions, as well as the casual treatment, that is, all that nine-tenths of the cases ever get, would be of little value.

TREATMENT OF SYPHILIS AT CAMP TRAVIS, TEXAS.

With the permission of the Surgeon-General, Captain Guy offers an interesting report on this subject in the September number of the *Journal of Cutaneous Diseases*, including Syphilis. With regard to prophylaxis, he states that a good deal more than ninety-nine per cent. of the cases of syphilis were brought into the army through the draft. The few cases contracted since entering the service are of interest mainly because they are preventable. The abolition of alcohol, the institution of clean

sports and entertainment, and personal talks to the soldiers explaining the dangers of venereal diseases have done much to help. The man who has disregarded warnings is required to report at once to a prophylactic station, where a solution of one of the silver salts is injected into the urethra and held for five minutes, and then a calomel ointment, 30%, is vigorously rubbed in externally. This is said to be a sufficient preventive in 90% of the cases. The date and hour of the exposure and of the prophylactic treatment is kept in every case, there are frequent inspections and those found to have been infected without taking prophylaxis, are courtmartialed. There is a record of about ten thousand prophylactic treatments up to date.

During a period of seven months there was a record of 105 cases of venereal disease acquired after service was entered, of which 57 did not have prophylactic treatment. It is assumed that an early diagnosis and prompt treatment have cured many cases of syphilis before there was a generalized infection. All cases of venereal ulcer were referred for a dark field examination before any treatment was applied, and two negative dark field examinations were required before any venereal lesion was pronounced non-syphilitic. Very few so-called tertiary or congenital cases were seen. Wassermann tests were made before any treatment was given and repeated before each course of treatment. The antisheep method is used in the laboratory, the antigen being a cholesterinized beef heart extract. Of 1500 reactions made up to date, positive results have been attained in about 20% of the cases, the large proportion of negative results being accounted for by the fact that a routine Wassermann test was required of certain groups of men. Each patient has a special syphilitic register, which goes with him if he is transferred, in order to follow up the treatment. Each patient has a thorough examination, including one by a dentist, before the treatment is begun, and particular attention is paid to the kidneys and heart.

The routine treatment consisted of rather intensive courses of arsphenamin or its equivalent, with mercury, the two drugs being used in conjunction. An arsphenamin injection and mercury were given each week for ten weeks, after which there was a complete cessation of treatment for five weeks. After this there was a repetition of the physical examination and of the Wassermann test, and another course of treatment was begun, and so on until the Wassermann reaction becomes negative and remains so. The writer, while not asserting that any of the secondary cases are cured, feels that it is probable that most of the primary cases have been cured. The arsenobenzol brand of arsphenamin has been the arsenical preparation used, and patients with infectious lesions were treated in the hospital. Tobacco was forbidden, and oral cleanliness required. Calomel ointment with massage was applied to local lesions once a day, followed by powdered calomel. When the patients become non-infectious, they are returned to duty, their syphilitic register being forwarded at the same time. When returned to duty the treatment is continued, the mercury is given at the regimental infirmary and the arsphenamin at the base hospital weekly, where the patients are sent at 9 A.M. on certain fixed days. Also the salicylate of mercury is given intramuscularly as a part of the routine treatment both in the hospital and after the return to duty.

The technic that has been adopted is used by all the regimental surgeons and the injections are given in the evening to avoid loss of time. At first ½ to ¾ of a grain are injected and this dose is increased at the rate of ¼ grain weekly until 2 or 2½ grains are given at each dose, provided that there are no contraindications. More intensive treatment is employed in cases in which the diagnosis is made by the dark field method, because we may then reasonably expect a speedy cure provided the individual is strong enough to stand energetic treatment. It is agreed that this treatment should be as intensive as is consistent with safety.

As to results, while it is too soon to publish conclusions, a positive Wassermann reaction has never been obtained in any of these cases. The routine treatment in primary cases is to give 0.1 gm. of arsphenamin for each 30 pounds of body weight, repeated twice the first week, followed by the usual weekly arsphenamin and mercury for ten weeks; then a rest of five weeks, after which a Wassermann test is made and the course repeated. After this the case is kept under observation, and Wassermann tests made at intervals. In so-called tertiary and certain late secondary lesions, the iodide of potash to saturation is given with the routine treatment. About 400 cases of syphilis

have been treated, and about 350 injections of arsphenamin and the same number of treatments with mercury are given weekly.

DERMATOLOGICAL STATISTICS FOR 1916.

S. Pollitzer[3] has published the statistics for the American Dermatological Association for the year 1916, no previous report having been issued since 1911. There were 31 returns for 17 cities, which yielded a total of 58,387 cases. Very little change from the normal averages was shown in the common skin affections. Progress in etiology and classification has been shown by the fact that whereas forty years ago one-third of all cases seen by members of the Association were called eczema, this year only one-sixth were reported with this name. Pollitzer remarks that the sifting process has been continuous throughout the four decades of the annual reports, and that it seems probable that we shall continue for some years to separate from the group of eczema more and more special forms of so-called eczema until it is reduced to its lowest terms. Some of the forms of so-called eczema that have been reported by some, have not yet been recognized by all, as in the case of chronic circumscribed eczema of the Vienna school, now known as lichen simplex, which appears in the list for the first time, although it is obvious that many still include the affection under eczema. Scabies shows a diminution, continuing the declining curve of the report published five years ago. Scabies was very prevalent during the Civil War, then declined rapidly soon after, to rise again until it reached 6% in the late eighties; after which it declined to less than half that figure in 1895, and after remaining stationary until 1901, suddenly and rapidly rose to nearly 10% of all cases seen in 1905; and then again dropped to about 5% in 1911. For 1916 the ratio was only 3.2%. Pollitzer truly says that it is highly probable that during the next year or two the assembling of large bodies of recruits in camps and the shifting of large masses of men will result in a great increase in this disease. This was the experience during the Civil War. With regard to the cancerous diseases, they form 2 1/3% of all the cases reported. Cancer has been steadily increasing in these reports, and that is in line with the commonly accepted view that cancer in general is on the increase. Per contra tuberculous diseases, although the so-called tuberculides have been included in this class, fall below the general average of these diseases for the first time. It is safe to conclude that tuberculous skin diseases are not increasing in this country. The second place in the statistical table is held by syphilis, over 7,500 cases being reported, or 13% of all cases seen. This is the highest in all the records, and is nearly 3% above the general average for this disease. It is not probable, however, that this shows a real increase in the number of cases of the disease, as the treatment of asymptomatic cases of the late stage, and of those with visceral lesions, has undoubtedly swelled the total of syphilis cases. The report shows that 739 cases were seen during the primary stage (1½% of all cases), 2,176 during the florid period (3½%), and 4,674 (8%) during the late period.

A LEPER COLONY ON THE BORDERS OF ABYSSINIA.[4]

Innes reports that this is the only leper colony in the northern part of Africa, although the disease is common about Omdurman, and sporadic cases are spread all over the country. It is of great frequency in Abyssinia, especially in the capital of that country. The colony is situated on a small hill about ten miles by the main road from Abyssinia. The total number of inmates of the colony was 26, 9 men and 17 women. The average duration of their stay was 13 years, with seven cases over 20 years. In four cases the husband and wife have both been lepers, always one being affected a long time before the other; but there is no record of any child having become a leper, although all the women had children before entering the colony. It is noteworthy, however, that almost all the children died young, although it was impossible to determine the causes of these deaths. As disproving the assertion that lepers are necessarily sterile, a woman not yet more than thirty years of age, who had been in the colony for seven years and had been leprous for ten years, had been twice delivered of children while in the colony. Her leprosy had been of the anesthetic type, although nodules were beginning to develop on the face. With regard to symptoms, all have a certain degree of bone pain, but nine of them complained that it was very severe and prevented sleep. In all there was some degree of leucoderma, except in three purely nodular cases, and in nine the non-pigmented areas

were very extensive. There were many ulcers under the toes and mutilations of the feet, and in almost all of the anesthetic cases there was a loss of fingers. The patient usually comes to the colony willingly, since the people about him are intolerant of his helplessness. There is no obligation for the patient to stay, and they often escape, but usually return as there is no place where they are so well off. It is asserted that "dermatol" has proved the most popular topical application to their lesions, and they are constantly supplied with it. Some microscopic work was attempted under poor conditions. Hansen's bacillus was found in great numbers in all of the nodular lesions, but none was found in the trophic ulcers. Some experiments with insects, with a view to their being possible carriers, proved negative. The fact that four husbands and wives were infected, one from the other, but that no child of all those born to the inmates of the colony has ever been infected, proves the low grade of infectivity of leprosy. Besides, although the disease is endemic in the Soudan, it never becomes epidemic. A point that differs from the view of most observers is that in this colony there were 17 women to only nine men, whereas it is commonly stated that there are 50% more cases in males than in females. The old fish theory is still strong. Innes states that careful observers told him that there was good reason to suspect that fried fish were a factor in the infection. In certain places the natives eat the dried Nile fish, which is sold in every marketplace within reach of the river; whereas other tribes will not eat it, and these latter are said never to develop leprosy. It is to be remembered, however, that only an extremely small part of the people who do eat it are affected with the disease. The writer exonerates the bed bug from all participation in carrying the disease.

REFERENCES.

[1] Crowder and Crowder: Arch. of Int. Med., February, 1917.
[2] The British Journal of Children's Diseases, October-December, 1917.
[3] Journal of Cutaneous Diseases, May, 1918.
[4] British Journal of Dermatology, April-June, 1918.

American Medical Biographies.

BARD, JOHN (1716-1799).*

THIS pioneer New York physician was the first in the United States to take part in a systematic dissection for the purposes of instruction and he was the first to report a case of extra-uterine pregnancy. His father, Peter Bard, a refugee from France on the revocation of the edict of Nantes, went first to London, and then to Delaware in 1703, on a mercantile venture. This not proving successful, he settled in Burlington, New Jersey, where he was appointed judge of the supreme court and a member of the governor's council, dying at an early age and leaving his widow, a daughter of an English physician named Marmion, with a family of seven children to educate on very slender means. John, her third son, born February 1, 1716, was sent to Philadelphia, where he received the rudiments of a classical education, partly at the hands of a Scotch gentleman, Annan by name, a man of reduced circumstances but an accomplished teacher of Latin and an exponent of polished manners.

At the age of fifteen John was bound apprentice, according to the custom of the day, to Mr. Kearsley, an English surgeon of good talents but of an unhappy temper. He treated his pupils with great severity and subjected them to most menial employments, to which John would have scarcely submitted, as he said, were it not for the fear of disappointing his mother and because of his affection for Mrs. Kearsley, who showed him the greatest kindness. For seven tedious years he stayed with the doctor, stealing his hours of study from sleep, after the family had gone to bed and before they got up in the morning.

An early intimacy with Benjamin Franklin, of kindred mind and no unequal fortune, served to brighten Bard's leisure hours and to stimulate his industry. They were members of the same club and they corresponded and kept up their friendship throughout their lives.

Dr. Bard settled in practice first in Philadelphia, where he married a Miss Valleau, a niece of Mrs. Kearsley, like himself a descendant of a refugee and equally destitue of the goods of this world. Of this union was born Samuel Bard, organizer of the first medical college in New York, and a noted writer on midwifery. After practising six or seven years in Philadelphia, Dr. Bard was induced by Franklin to move to New York in the year 1746, to take the place of Dr. Dubois and Dr. Dupie, who had died there of yellow fever. His cheerfulness, conversational ability and

* From the forthcoming "American Medical Biography" by Dr. Howard A. Kelly and Dr. Walter L. Burrage. Any important additions or corrections will be welcomed by the authors.

tact, coupled with sound professional attainments, soon won for him a large practice among the better classes. Bard read much in the medical literature of the day and also in the English authors, and his retentive memory enabled him to delight his friends with long and appropriate quotations.

Upon the arrival in New York harbor of a Dutch ship in 1759 containing cases of a malignant ship fever, Dr. Bard was employed by the corporation to take proper quarantine measures. Every nurse and attendant in the hospital had the disease. Thus was Bard impelled to draw up a memorial urging the expediency of providing a pest house against similar occurrences, and the result was the purchase of Bedloe's Island and the building upon it, Bard becoming health officer. He was, likewise, appointed surgeon and agent for the sick and wounded seamen of the British navy at New York, retaining the positions until he retired from practice. He was a friend of Dr Peter Middleton, one of the noted medical men of the time and a founder of the medical department of King's College, and Bard assisted Middleton in the first recorded dissection.

As regards this, David Hosack says (*American Medical and Philosophical Register*, 1812, ii, 228): "As early, however, as 1750, the body of Hermannus Carroll, executed for murder, was dissected in this city by two of the most eminent physicians of that day, Drs. John Bard and Peter Middleton, and the blood vessels injected for the instruction of the youth then engaged in the study of medicine: this was the first essay made in the United States for the purpose of imparting medical knowledge by the dissection of the human body, of which we have any record."

In 1778 Dr. Bard retired from practice and settled on a farm he owned at Hyde Park, on the Hudson, in Dutchess County, but being reduced in fortune by the Revolution, he returned to New York at the peace of 1783 and resumed practice. On the establishment of the Medical Society of the State of New York in 1788, he was unanimously chosen its first president.

Dr. Bard was not a voluminous writer. In a letter to Dr. John Fothergill of London, dated December 25, 1759, he communicated "A Case of an Extra-uterine Foetus," that was read to "A society of physicians in London," March 24, 1760, and published subsequently in "Medical Observations and Inquiries," in 1762 This first case to be reported has an interest to every medical reader. It was a woman of 28 years who went through her second pregnancy with only slight abnormal symptoms, and at the end of nine months had a few labor pains, but delivery did not take place. In spite of the presence of a large right-sided abdominal tumor, she had another healthy child by a normal labor, but five days after delivery pain and fever began, and at the end of nine weeks of treatment by fomentations, fluctuation in the tumor could be determined. Dr. Bard, in the presence of Dr. Huck, an army physician, opened the abdomen by a long incision and delivered a macerated full-time fetus and much pus, the patient then nursing her child and making a good recovery. Several papers on yellow fever from Dr. Bard's pen are to be found in the files of the *American Medical and Philosophical Register*, and after his death there appeared in the same publication (April, 1811, i, 409-421) an essay on the nature and cause of malignant pleurisy that had been delivered before "A weekly society of gentlemen in New York," in January, 1749. Here we have a reference to, probably, the earliest medical society in the country. It was patterned after Dr. Fothergill's London society apparently and, according to Peter Middleton, was in existence twenty-five years later.

In 1795 Dr. Bard, then being in his eightieth year, gave an address before the state medical society, calling attention to the presence of yellow fever in the city, meeting much opposition and some obloquy by so doing. Nevertheless, his advice as to the treatment of this dread disease,—sweating the patient,—proved more successful than other methods. In 1798 he gave up practice and retired to Hyde Park, where he died March 30, 1799, at the age of 83. His charm of conversation, vivacity and cheerfulness never forsook him, and thus he passed to the great beyond admired, respected and beloved.

BIBLIOGRAPHY.

Amer. Med. and Phil. Reg. 1811, i, 61-67, Portrait.
Dict. Amer. Biog. F. S. Drake, 1872.
Med. Observns. and Inquiries. Lond., 1762, ii, 369-372.
Letters of John Bard in Life of Samuel Bard, Rev. John McVickar. New York, 1822.

WALTER L. BURRAGE, M.D.

Society Report.

JOINT MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION AND THE LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.

(Concluded from page 708.)

THE ACTIVITIES OF THE SUBCOMMITTEE OF OTOLARYNGOLOGY, SECTION OF SURGERY OF THE HEAD, SURGEON-GENERAL'S OFFICE.

CHARLES W. RICHARDSON, M.D., CHAIRMAN.

This committee, consisting of Dr. Richardson, Dr. Shurly, and Dr. Mosher, presented to the Surgeon-General the resolution of the societies they represented as to the need of establishing a division of the Medical Corps of the Army and Navy, to assume charge of injuries of the head and air passages and the diseases of the eye, ear, nose and throat, acquired in service, in addition to making special examinations of aviators and the employment of hospitals and their staffs for this purpose.

The Surgeon-General of the Army promptly appointed Major T. C. Lyster as an adviser to the committee, and the Surgeon-General of the Navy appointed Surgeon G. E. Trible, and these two, together with the original committee, were subsequently appointed by the General Medical Board of the Council of National Defense as a subcommittee on the nose, throat and ear, of the Surgical Specialties.

Of 5468 questionnaires sent, 2014 replied, while 3474 failed to answer.

A request was made to the General Medical Board of the Council of National Defense that the Subsections of Laryngology and Otolaryngology and the Subsection of Ophthalmology should meet in joint session.

A request was made also for the addition of a Brain Surgeon to the Ophthalmologic Section, and an Oral and Plastic Surgeon to the Otolaryngologic Section, thus completing the Division of Surgery of the Head. This request was also promptly approved by the Surgeon-General of the Army.

Dr. William H. Wilmer was made chairman of the joint Section of Surgery of the Head. Dr. V. P. Blair and Dr. Bagley were made members of the subcommittees.

The Subcommittee on Otolaryngology was formally approved by the Council of National Defense on August 15, 1917.

The following activities for otolaryngologists have been established:

Suggestions for a one thousand bed hospital for the Surgical Head Section on the Western front abroad were presented to the Surgeon-General and approved. The members of the subsection visited various large cities and addressed otolaryngologists to arouse their enthusiasm and gain recruits to the Army Medical Service; otolaryngologic instruments standardized; requirements for entrance into the Army as to hearing revised; tests for malingerers assembled; tests made to ascertain the value of ear protectors; plans for a special hospital and dispensary building in cantonments for the Section on Surgery of the Head; the activities of the subcommittee outlined and sent to the members of the national societies; the appropriate grade of the assignment of the various candidates in the Medical Reserve Corps was indicated by the members of the committee in the office of the Surgeon-General; an accurate tab on the professional qualifications and character of each candidate for service was had; the assignments in otolaryngology at base hospitals and cantonments; a roster of men to be assigned in otolaryngology in base hospitals abroad (in preparation); a course of lectures at the cantonments by the Chiefs of the Otolaryngologic Staff ordered, the officers designated to deliver the lectures, subjects given for the lectures, and a list of the books for the library prepared.

Major H. W. Loeb of St. Louis was assigned to the office of the Surgeon-General to prepare a War Manual of Otolaryngology.

Major B. R. Shurly resigned, and Major J. H. Bryan was nominated by the Council of the American Laryngological Association to the vacancy. This was approved.

Major Mosher was ordered abroad on an inspection tour with Lieut.-Col. Lyster, and Major Richardson to temporary duty in the Surgeon-General's office.

Exhibits are presented indicating the various subdivisions of the Surgical Service approved by the Surgeon-General. Finally, Colonel Richardson presented a report on the proposed reconstruction of the defects on hearing and speech as a result of casualties in war.

This exhaustive and comprehensive report is accompanied by exhibits in detail.

THE BOSTON
Medical and Surgical Journal

Established in 1828

An independently owned Journal of Medicine and Surgery published weekly under the direction of the Editors and an Advisory Committee, by the BOSTON MEDICAL AND SURGICAL JOURNAL SOCIETY, INC.

THURSDAY, DECEMBER 12, 1918

RED CROSS INSTITUTE FOR THE BLIND.

THE Red Cross Institute for the Blind has been organized at the request of the Surgeon General of the Army to supplement the training to be given at the Military Training School for the Blind. Its purpose is to supply the necessary economic and social supervision of blinded marines, sailors and soldiers, after their discharge from military service. A careful study will be made of the soldier's past life to ascertain his previous occupation, his stability, wages, moral career, social environment, his military or naval record, and the possibilities of his home community.

The occupational possibilities open to the blind will be investigated and new fields discovered in order to help the blind to become self-supporting wage earners. There are processes in factories which would be immediately available to the blind if special devices were arranged for the machines. These processes will be tested, and classes will be offered at the Military Training School for those who will later enter factories. The institute will assume the double responsibility of placing the man in the industrial world and also of removing him if he proves to be inefficient.

Blind workers may be divided into five classes: those who can work in shops with the seeing, in shops maintained for the blind, in commercial enterprises, in agricultural pursuits, and those who can work only at home. The policy of the Institute will be to assist the man to find work either in his old occupation or in some closely allied trade whenever this is possible. For those who have not mental or physical stability to go into regular factories, special small shops will be established. Men who were attending technical schools or colleges before their enrollment in the Army or Navy will be given an opportunity to continue their studies whenever such a course seems practicable. Embossed books will be provided for all blinded men.

In order to secure the understanding coöperation of the families of the blind and to avert the mistaken sympathy which is an additional handicap to be overcome in the blind man's progress, a cottage for relatives will be built in Baltimore, near the Military Training School. Whenever a relative can be trained to assist the blinded man in carrying on his future trade or profession, instruction will be provided without additional expense. Some arrangement will be made by the Institute to provide tools and materials necessary for reëstablishing the blind in their future occupations.

HOME SERVICE AND THE DISABLED SOLDIER.

THE nation will not have expressed its gratitude to the soldiers who have been disabled in her service until it has administered the best of medical and surgical care, granted financial compensation in proportion to the degree of injury, and provided systematic training for renewed industrial life. The Federal Government has recognized its responsibilities in assuming leadership in this work, although the coöperation of other agencies will be of invaluable assistance in fulfilling the country's obligations.

The Home Service section of the Red Cross is particularly well adapted to assisting in carry-

ing out the Government's program for the treatment, training, and placement of men injured, or disabled by disease, in the service of the country. A pamphlet entitled, "Home Service and the Disabled Soldier," written by Curtis E. Lakeman, presents the principles which will be followed in undertaking this work. It describes the treatment and training which will be offered to the disabled soldier, the types of employment he may secure, the just compensation he may expect, and the provision which will be made for his after-care.

Both sympathy and intelligence will be needed in order to carry out the proposed plans effectively. It is detrimental both to the soldier's ultimate happiness and to the nation's industrial and labor resources, to allow the man who is disabled to waste the remainder of his life in dependence upon his family or some charitable institution. It is the purpose of the Red Cross Department of Civilian Relief to ensure the support and encouragement of the man's family in his effort to make the most of his opportunities; to give competent advice throughout the course of his vocational training; to create the right attitude among employers; to assist the men, through competent legal advice to secure the benefits of the War Risk Insurance law; to urge upon disabled men the wisdom and necessity of taking full advantage of the Government's plan for their care and training; to encourage them in the early and critical stages of their vocational training and of their return to employment, when the struggle to overcome mental and physical handicap is most acute; and to mold public opinion so that it will discountenance hero-worship and maintain an attitude which is both sympathetic and constructive.

DISTRIBUTION OF RED CROSS FUNDS.

The object of the American Red Cross is first and foremost the alleviation of human suffering and although the "Greatest Mother of them All" realizes the enormity of her task in comforting the soldiers and sailors, she does not forget that among the civilian population there are battles to be fought against disease. In order that the funds appropriated for this tremendously important work shall be expended with the utmost care and with a view toward accomplishing the best results, the National Tuberculosis Association has announced the following plan for distribution during 1919 of the appropriation of $2,500,000 from the American Red Cross.

1. The National Tuberculosis Association reserves 10% or $250,000 for the support of the society and for a missionary fund.

2. Without any deductions or commissions, each state and general agent under direct contract with the National Tuberculosis Association in 1917 is allowed an amount equal to the gross proceeds from the sale of 1917.

3. The state organizations and those local organizations that were in direct contract with the National Association in 1917 will receive a share in the remainder (approximately ($450,000) in proportion to the Red Cross members enrolled in their respective territories during the coming Christmas roll call. This ratio of distribution will depend on the proportion of members enrolled in such territory to the total membership in the United States subscribing at the coming roll call.

4. If a state feels that the amount allotted to it is not sufficient for its needs, it may submit a detailed statement of its expenses to the National Association and then if the executive committee approve, such allotment will be increased after payments have been made as under Paragraphs 2 and 3.

5. On or about January 1, 1919, the first appropriation will be made and thereafter quarterly during the year.

6. The right to withhold or modify appropriations not in harmony with the budgets previously presented to the National Association will be exercised by the Executive Committee.

7. Suggestions as to distribution will be gladly made to any state association wherever requested, but the National Association will not be responsible for the division of money in the several States.

GREAT MORTALITY OF INFLUENZA EPIDEMIC.

During the period from September 8th to November 9th inclusive, 47 large American cities of an estimated population of 23,000,000 reported an aggregate total of 82,306 deaths. Assuming that the average death rate during this period was normal, 4,000 deaths could be accounted for as due to other causes, but a

death rate of 78,000 during one month from influenza and pneumonia alone, is indeed a heavy toll. Thus far reports of the ravages of the epidemic prove that the deaths greatly outnumber those of the war casualties in the American Expeditionary Forces. An unofficial report of the casualties among the members of the American Expeditionary Forces during the period from America's entrance into the War to November 9th approximates 100,000 casualties, and of this number, between forty and forty-five per cent., or about 45,000, is estimated as a total loss of life. A startling comparison is therefore brought to light in the report from the Department of Commerce, Bureau of Census, at Washington, D. C., where it is stated that during a period of nine weeks the mortality resulting from the influenza epidemic was nearly double that in the American Expeditionary Forces from the time the first contingent landed in France until the cessation of hostilities. The epidemic ravaged the country generally from coast to coast and reached its height during the two weeks ending October 26th when 40,782 deaths were reported. For the entire nine weeks period, the greatest mortality due to this epidemic in proportion to population (7.4 per thousand) occurred in Philadelphia and the next greatest (6.7 per thousand) was reported for Baltimore. In Boston, one of the eastern cities, a larger number of deaths was reported for earlier periods than that which covered the height of the epidemic for the 45 cities taken as a group and in New Haven, New York, Pittsburg and Rochester, the maximum mortality occurred later than in the Eastern cities.

MEDICAL NOTES.

FORMER SURGEON-GENERAL RETIRES.—Dr. William Gorgas retired in October from his position as surgeon-general of the United States Army. He will resume the work he temporarily relinquished for war service as director of yellow fever work for the Rockefeller Foundation. He will sail soon for South and Central America.

In January, 1917, Dr. Gorgas was released by Secretary Baker to direct the Foundation's yellow fever commission, which has investigated and studied the conditions in all countries in which the disease has appeared in recent years. The work was temporarily abandoned because of the war, but it will be resumed and carried on in coöperation with the various local governments.

TRAVEL RESTRICTED FOR PERSONS HAVING VENEREAL DISEASES.—Persons having venereal diseases must obtain a permit in writing before they will be allowed to engage in interstate travel, under an amendment to the interstate quarantine regulations recently announced by Surgeon General Rupert Blue of the Public Health Service. The permit must be issued by the local health officer under whose jurisdiction the persons reside, and it must state that such travel is not dangerous to the public health.

HONORARY MEMBERSHIPS FOR AMERICANS IN LEADING FRENCH MEDICAL SOCIETY.—The Société Médicale des Hôpitaux de Paris elected at a recent meeting, as corresponding members *honoris causa*, Dr. Alexander Lambert, the president-elect of the American Medical Association, director of the medical service of the American Red Cross in France; Col. James T. Case, editor of the *American Journal of Radiology* and chief of the radiologic service of the American Army in France; Prof. William S. Thayer of Johns Hopkins, consultant to the American Expeditionary Force; Prof. Morton Prince of Tufts College, New York; Dr. Simon Flexner, director of the Rockefeller Institute for Medical Research, and Prof. Beverley Robinson of the University and Bellevue Hospital in New York, a former intern of the Paris hospitals. At the same time, five British physicians were also elected, including Sir Almroth Wright, Sir Bertrand Dawson, Sir Thomas Barlow, Sir Dyce Duckworth and Sir William Leishman. The motion to elect these eleven honorary members was presented by Netter, the president of the society, Chauffard, Béclère and Major Rist. The latter had not long returned from a visit to America.

DEBARKATION HOSPITAL OPENED IN NEW YORK.—The largest hospital of its kind in the world and the only one of its type to be located in the business section of a great city was formally opened in New York on November 25. 500 wounded men made up the first contingent of patients.

The new hospital, Base Hospital Number 3, occupies the building that was formerly the Greenhut department store, at Sixth avenue and

Eighteenth street. The hospital has accommodations for 4,000 patients. It will be used as a debarkation hospital to which the wounded men will be taken from the incoming hospital transports. The patients will stay only until they have recovered sufficiently to be able to be transferred to hospitals nearer their homes.

Major W. J. Monaghan is in charge of the hospital. The staff under him includes Captain Whalen, Captain Ralph Jones, and Captain B. B. McClellan.

BOSTON AND MASSACHUSETTS.

WEEK'S DEATH RATE IN BOSTON.—During the week ending November 30, the number of deaths reported was 241 against 216 last year, with a rate of 16.02 against 14.58 last year. There were 36 deaths under one year of age against 31 last ear.

The number of cases of principal reportable diseases were: diphtheria, 41; scarlet fever, 22; measles, 6; whooping cough, 8; typhoid fever, 2; tuberculosis, 41.

Included in the above were the following cases of non-residents: diphtheria, 6; scarlet fever, 2; whooing cough, 1; typhoid fever, 1; tuberculosis, 2.

Total deaths from these diseases were: diphtheria, 1; tuberculosis, 16.

Included in the above were the following non-residents: tuberculosis, 2.

FLORENCE CRITTENDON LEAGUE OF COMPASSION.—In a circular letter sent to physicians in New England, the Florence Crittendon League of Compassion offers to the profession the facilities of its Maternity Home and Hospital for such cases as physicians may desire to refer to them. The Medical Staff is composed of men who have graduated from Harvard Medical School and at least two other hospitals. Attention is called to the six months' Course in Obstetrical Training for Nurses.

MASSACHUSETTS STATE CONFERENCE OF CHARITIES.—The Massachusetts State Conference of Charities will meet at Springfield on December 5, 6, and 7, for its 15th session. Much of the discussion and debate will have to do with the finding of methods of prevention of social evils rather than remedies for them. The general topic of discussion and debate will be "Social Reconstruction." Men and women who have made a study of mental diseases will offer their deductions. Among the speakers will be Herbert C. Parsons, deputy commissioner of probation; Dr. Walter E. Fernald, superintendent of the Massachusetts Feeble Minded School at Waverley, and the Rev. Augustus P. Reccord of Springfield, president of the conference.

UNDERWOOD HOSPITAL IN NANTUCKET.—The influenza epidemic on the Nantucket Island has subsided, and the ban on public meetings has been lifted. The schools, moving picture houses, and churches, which have been closed for three weeks, have been opened again.

The new Underwood Memorial hospital, erected by Mr. H. O. Underwood of Belmont, has been completed and was used as an emergency station during the epidemic. The automobile ambulance given by Miss Sturtevant was of great service during the epidemic.

The new hospital was built at a cost of about $50,000. It adjoins the building which has been used as a hospital for the past five years.

During the recent epidemic 250 cases have been reported. A temporary home for physicians, nurses, and members of the Board of Health was opened in the Nesbit Hotel.

Obituary.

HARRISON BRIGGS WEBSTER, M.D.

WITHIN a few days of the joyful news of peace, there came other tidings which have changed the happiness of many to deep sorrow —the death in action of Dr. Harrison Briggs Webster of Boston. There was probably no man in his college class who was more universally loved, and to some of us at least it seems still incredible that we shall never again hear his hearty laughter and his never-failing flow of good spirits. These, however, were but the ripples on the surface of a deep and serious nature, which constantly showed a determination to be useful—essential, rather—to his community.

Harrison Webster was born on January 26, 1884, the son of Andrew Gerrish Webster and Lizzie Florence (Briggs) Webster. His education was at Noble and Greenough's School in Boston, at Harvard College (A.B., 1905), and at the Harvard Medical School (M.D. 1909).

In college Webster was a member of several clubs, social, literary and scholastic, among others the Hasty Pudding Club, the Kalumet Club, and the Phi Beta Kappa Society. In ath-

letics he devoted his time chiefly to rowing; in his freshman year he was on the class crew, in his sophomore year on the University four-oared and second crews and on the second Newell crew; in his junior year on the second Newell crew, and in his senior year he was captain of the Newell Boat Club, stroked the third Newell crew, and rowed on the class crew. An operation on his knee in December, 1904, was all that prevented his rowing on the 'Varsity eight. In his senior year he was elected to the Class Day Committee, and, on the academic side, received honorable mention in chemistry, graduating *cum laude*.

Entering the Harvard Medical School in the fall of 1905, Webster was one of a small group of classmates whose career in the school knit very closely the bond of friendship. It was my great good fortune to be paired with him in all the work where the students worked two and two, and a close friendship sprang up between us which "nothing in life could sever." I had known him at school, until I left and attended another; again at college, where, however, I saw but little of him; but in the Medical School we became real "pals" and always remained so.

Webster was one of the best scholars in his class at school, and was elected to the Alpha Omega Alpha Society, which corresponds to the Phi Beta Kappa Society in college; he also joined the Aesculapian Club, was class secretary for three years, and was marshal of his class at Commencement in 1909. He received one of the first appointments to the Massachusetts General Hospital, and served there as surgical house officer from July 15, 1909, to November 30, 1910.

After a short term at Bellevue Hospital, New York, his love of the North and its freedom from the trammels of civilization, which he had experienced during the summers of 1905 and 1907 with Dr. Grenfell in Labrador, led him to take up this work again; he spent the spring and summer of 1911 at Battle Harbor, and then joined his classmate, Dr. Hugh P. Greeley at Pilley's Island, Newfoundland. At Dr. Grenfell's request they converted an old miners' shack into a hospital in an entirely new field, and equipped it for medical and surgical cases. They were the only doctors within a hundred and fifty miles. Here he spent the winter, travelling by motor boat until the ice closed navigation, and then on snowshoes or by dog-team, matching his ingenuity against the almost total lack of surgical facilities, and doing pioneer work among a poor but grateful population. In his letter to the class secretary for the decennial report, Webster speaks of this as "the best year of my life."

Returning in the spring of 1912, he found himself more than ever dissatisfied with life in a large city, and settled in Castine, Maine. After a year of practice there, he married, on May 1, 1913, Margaret Isabel Gleason of Northhampton, Mass. By 1915 he had bought a house in Castine, and fitted it up as a six-bed hospital, and his practice had become very successful when, in April, 1916, the United States entered the war.

While in college and in the medical school, Webster had been a member of Battery A, and had also attended a term at Plattsburg later. He at once applied for a commission, but, tired of waiting, went back to Plattsburg in April, 1917. When he had been there a month his commission reached him, and he was sent to Fort Benjamin Harrison, Indianapolis, and put in charge of the ambulance corps. His organization of this corps was so conspicuously good that when Surgeons-General Gorgas and Blue inspected the camp Webster received personal commendation for his work. Within nine months he was promoted from lieutenant to captain and from captain to major; he was then made director of the ambulance at Fort Oglethorpe in Georgia. His Corps, Ambulance 14, went with him, and again attracted the attention of Surgeon-General Gorgas; he asked what corps it was, and when told, referred to it as "the crack ambulance corps" which he had seen at Fort Benjamin Harrison.

On May 25, 1918, Webster was sent to England, and two weeks later went to France as a regimental surgeon. He was connected with the Forty-seventh Infantry, Fourth Division, under General Robert Lee Bullard. Letters to his family and a letter from one of his men to a Colonel at Fort Oglethorpe tell some of the details of his heroism. It appears that before the American offensive in his zone began, Webster looked the ground over and decided that motor ambulances would not be practicable in such rough country; consequently, he organized a corps of push-cart ambulances, went "over the top" with his men, steered by compass in the dense fog, and found himself with the work of handling the wounded of two regiments, five hours ahead of any other sur-

geons, who, when they did arrive, had only the supplies that they carried on their persons. Here he worked, doing many things outside of his regular sphere of duty. He carried the wounded on his back to the ambulances, and, when the push-carts gave out, sent for mules and attached them to abandoned German wagons. These improvised ambulances he drove himself on mule-back, as he had driven caissons in the old Battery A days. For this work he received personal commendation from his Brigadier-General. Some days later, while pushing with his shoulder to the wheel of a motor ambulance which had got stuck in the mud, he was instantly killed by an exploding shell.

Webster is survived by his wife and three children: Andrew Gerrish Webster, born in June, 1914; Margaret Elizabeth Webster, born in June, 1916; and Dorothy Lancaster Webster, born after her father had left for France, in June, 1918. The exact date of his death is uncertain; the official report states that he died on October seventh, but a letter has been received from him dated October tenth.

Halting all sham and pretence, "Bunty" Webster was a practical, common-sense man, a skilful surgeon, a loyal friend, and a straight-grained gentleman. The words of General Pershing in speaking of Dr. George P. Howe, also killed in action, apply equally well to Webster: "His was one of the spirits that bring pride to our own hearts and confidence to the hearts of our allies."

"Bunty" and I were once looking at a picture of his father's cousin, Lieutenant Frederick Hedge Webster, who was fatally wounded at Fort Wagner under Colonel Shaw; he was but twenty years old at the time, and we wondered whether our generation would respond, with our comfortable upbringing, as did the previous generation, to our Nation's call of need; "Bunty," true heart, has answered the question.

H. B.

Miscellany.

THE VENTILATION AND HEATING OF SCHOOLHOUSES.

AT a public hearing held at the State House, June 11, 1918, the appointment of a special committee by the Chief of the District Police, for the purpose of studying the problem of the ventilation and heating of schoolhouses, was urged.

This committee has been appointed and consists of a representative from the District Police, one from the State Board of Education, one from the State Department of Health, an architect, and a heating and ventilating engineer. The committee has held several meetings and realizes that the subject is one of great magnitude, involving the health and comfort of thousands of school children and school teachers. It is of vital interest to every citizen whose children are being educated in our public and private schools; to every city or town or corporation maintaining public or private schools; to school and health officials who educate and care for the health of pupils; to engineers, architects, and builders, who design and erect our school buildings; and especially to the public who provide funds for the erection and maintenance of schools.

The committee proposes to hold meetings at the State House, Boston, in order to gather all the information possible on both sides of the question. The first hearing will be in Room 446, State House, December 14, 1918, at 10.30 a.m. A second hearing will be held December 16, 1918. All physicians interested are urged to come.

Correspondence.

THE COVENTRY CASE.

Boston, Nov. 27, 1918.

Mr. Editor:—

This case (Pratt and others *vs.* The British Medical Association and others) is of such far-reaching importance to the medical and other professions that it is sure to excite much attention here also. Accordingly, it will be well to have accessible the following references:

Lancet, Oct. 19, 1918, p. 533, a brief note (damages awarded over $18,000 and heavy costs); ditto, pp. 527, 528, "leader" mentioning that the *British Medical Journal's* "report was a remarkably accurate account of the principal features of the case." This report of the protracted hearings (in the King's Bench Division, July 15 to 30, both inclusive) is in the *British Medical Journal*, Aug. 3, 1918, pp. 123-125; Aug. 10, pp. 155, 156; Aug. 17, pp. 161-164. Note of the decision, at the next term, Oct. 15, is in *B. M. J.*, Oct. 19, p. 451; leader, Oct. 26, p. 472, that appeal had been decided upon; ditto, supplement, pp. 53-60, giving full report of the judgment. Nov. 2, p. 502, a note of hearing on questions of costs, and application for injunction on the Association in place of its undertaking, but this the Court was compelled to postpone.

Comment could not be compressed into space available.

ALFRED ELA.

RECENT DEATHS.

DR. W. L. WASSON, Superintendent of the Vermont State Hospital for the Insane, and an authority on mental diseases, died recently in Waterbury, Vt.

SAMUEL ABBOTT GREEN, M.D., a retired Fellow of The Massachusetts Medical Society, died at his home in Boston, Dec. 5, 1918, aged 88 years.

NOTIFICATION OF VENEREAL DISEASES.

THE accompanying self-explanatory chart presents the results of the reporting of cases of venereal diseases in this Commonwealth and in Boston during nine months of the current year. These diseases were made notifiable by the State Department of Health on February 1, 1918, as a war measure, which was announced in the JOURNAL at that time. It will be seen that the results have been highly satisfactory, and further benefits are to be expected from the continuance of this policy after the establishment of peace.